Meat Facility Standards

Alberta
HEALTH AND WELLNESS

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AGRICULTURE, FOOD AND
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Establishment: Design and Maintenance

Objectives:
Facilities where meat and meat products are processed and handled should be sited, designed, constructed and maintained in a manner that:

- permits operations within the facility to be performed under sanitary conditions;
- permits effective cleaning and sanitation of all surfaces; and
- prevents the contamination of meat and meat products.

Rationale:
The design and construction of facilities for meat processing and handling should incorporate features to prevent hazards that could affect food safety. These features should provide a processing environment suitable for operational needs and control product and employee flow to minimize cross contamination. The features should also permit easy cleaning and sanitation, control the entry and harboring of pests and control the entry of environmental contaminants such as smoke and dust. Regular maintenance is required to prevent deterioration of the facility.

1. Plans for all new construction, whether it be for new meat facilities or renovation of existing meat facilities, shall be submitted to the appropriate ministry (ie. AAFRD, Regional Health Authority).

2. Plans submitted shall include:
   - layout of facility;
   - equipment in the facility;
   - sewer/water provisions;
   - lighting;
   - surface finishes;
   - product/personnel flow;
   - sanitation program.

3. Walls and ceilings are made of waterproof, non-absorbent, washable materials. Where appropriate, angles between walls, between walls and floors, between walls and ceilings should be sealed and coved for easy cleaning and sanitation.

4. Floors are constructed of waterproof, non-absorbent, washable and non-slip materials which are easy to clean and sanitize. Floors should be sloped for sufficient drainage of liquids and each processing area is provided with sufficient drains to prevent water accumulation.

5. The plumbing system and the sanitary drainage system or private sewage disposal system, as the case may be, including drains, fixtures, stacks, traps, vents, waste disposal facilities, pump-out tanks and septic tanks, are maintained in proper operating condition and free from defects.

6. Lighting systems in the meat facility are capable of providing lighting adequate for the purposes of the facility, do not alter food color and are maintained in operating condition.

7. Lighting fixtures are located and are of safety type or protected to prevent contamination of food in case of breakage.

8. A supply of hot and cold potable water sufficient to meet the needs of the meat facility is available.

9. Handwashing stations adequate in number and location shall be available to ensure convenient access to all employees. Sinks must be supplied with hot and cold running water, soap, hot air dryers or single service paper towels and a waste bin.

10. The meat facility must be equipped with appropriate equipment for cleaning and sanitation. (ie. a high pressure washer for cleaning and sanitizing the premise and large equipment, and a two compartment sink for cleaning and sanitizing smaller equipment.)

11. Depending on the operation, adequate facilities are available for heating, cooking, cooling and freezing and for storing refrigerated or frozen meat and meat products. Temperature monitoring equipment is a requirement (e.g. thermometers). Temperature for coolers shall be less than 4°C (40°F). Temperature for freezers shall be less than -18°C (0°F).

12. Adequate facilities for the storage of food, ingredients and non-food chemicals (e.g. cleaning materials) should be provided.

13. Windows and other openings should be constructed to permit easy cleaning and those which are open should be fitted with screens to prevent the entry of pests.

14. Doors should have smooth, non-absorbent surfaces and be close fitting.

15. Overhead structures and fittings are installed and maintained in a manner that avoids direct or indirect contamination of meat and meat products by condensation, drip and dirt. They also should not interfere with cleaning and sanitation.

16. Ventilation is provided to prevent excessive heat, steam condensation and dust and to remove contaminated air. The direction of airflow is never from a dirty area to a clean area. Ventilation openings are screened or protected to prevent entry of pests. Screens are easily removable for cleaning.

17. Adequate and conveniently located employee facilities are to be are provided. These areas should be well lit and ventilated; and located and built in a manner to prevent cross contamination between these facilities and meat processing areas (e.g. washrooms must not open directly onto processing areas). Adequate facilities for washing, sanitizing and drying hands must be provided.

18. The water supply shall be potable, with characteristics within limits recommended in the

latest edition of "Guidelines for Canadian Drinking Water Quality" published by Health Canada.

19. All water storage facilities need to be maintained, cleaned and sanitized on a regular basis to prevent contamination of water.

20. Surrounding areas under the establishment's control are properly maintained to control the entry of dust, run off and other potential sources of contamination to the manufacturing/processing area.

Equipment: Design and Maintenance

Objective:
The equipment used in the manufacture of food shall be designed, constructed, maintained, operated and arranged in a manner that:

- permits the effective cleaning of its surfaces;
- prevents contamination of the food; and
- permits it to function in accordance with its intended use.

Rationale:
The purpose of these requirements is to prevent the contamination of food by microorganisms, dust and foreign material such as rust, lubricant and parts coming from the equipment. In addition, this is to prevent cross-contamination with other food, which may be of concern to people with food allergies. Poor design and construction may result in equipment that is difficult to clean and requires a higher degree of maintenance. Contamination problems may also arise from poor maintenance, misuse of equipment, exceeding the capacity of the equipment, use of worn-out equipment and improper modification of equipment.

Equipment arranged in an orderly manner permits cleaning of adjacent areas, does not interfere with other processing operations and minimizes cross-tracking by personnel.

1. Equipment is designed, constructed and installed to ensure that it is capable of delivering the requirements of the manufacturing process.

2. Food contact surfaces of equipment and utensils are smooth, non-corrosive, non-absorbent, non-toxic, free from pitting, cracks or crevices.

3. All equipment and utensils are designed, constructed and installed to permit adequate cleaning and sanitizing.

   Examples of coatings, paints, chemicals, lubricants and other material used for food contact surfaces or equipment are listed in the "Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents", published by the Canadian Food Inspection Agency (CFIA).

4. Procedures are in place for maintenance and calibration of equipment that could have an impact on food safety.

5. Climate control spaces (e.g. freezers, refrigerators, smoke houses, curing and drying rooms, etc.) are equipped with appropriate measurement or recording devices (e.g. temperature, humidity, air flow, etc.).

6. Containers for inedible material and waste are leak-proof, easily distinguishable from other containers, constructed of an impervious material, which is easy to clean or disposable and, where appropriate, can be closed securely.

7. Equipment and utensils used for inedible material or wastes are identified as such and are not used for edible material.

Establishment: Sanitation and Pest Control

Objective:
To establish effective sanitation and pest control programs ensuring

- proper cleaning and sanitation of facilities, equipment and utensils;
- control of pests; and
- effective monitoring of cleaning and sanitation procedures.

Rationale:
Sanitation and pest control in a meat processing facility directly influences the safety and quality of meat and meat products. Production of safe high quality products requires that they be produced in equipment and in an area that is free from environmental and microbiological contamination. Sanitation and pest control programs, written, practiced and monitored, provide assurance that levels of cleanliness and sanitation are maintained.

1. Written sanitation and pest control programs are to be developed, implemented, maintained and reviewed periodically and should contain procedures for:
   - cleaning requirements for the facility, processing and storage areas; including coolers, floors, walls, cooling units;
   - cleaning requirements for equipment and utensils;
   - method of cleaning;
   - frequency of cleaning;
   - cleaning and sanitation agents, their concentrations and equipment to be used;
   - method of pest control;
   - chemicals, their concentration and frequency of application;
   - where applicable, the name of the pest control company or individual contracted for the pest control program;
   - the personnel responsible for carrying out sanitation and pest control programs.

2. All approved cleaning and sanitizing chemicals must be used in accordance with the manufacturer's instructions, examples are listed in the "Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents", published by the Canadian Food Inspection Agency (CFIA).

3. Pesticides used are registered under the Agriculture and Agri-Food Canada, *Pest Control Product Act and Regulations* and "Reference Listing of Accepted Construction, Packaging Materials and Non-Food Chemical Agents", published by CFIA.

4. Cleaning and sanitation programs should be in place to ensure that all areas, equipment and utensils are cleaned and sanitized on a daily basis.

5. Buildings should be kept in good repair. Cracks and crevices, drains and other places where pests are likely to gain access should be kept sealed.

6. Suitable provision must be made for the removal and storage of waste.

Personal Hygiene

Objectives:
To ensure that those who come directly or indirectly into contact with food are not likely to contaminate food by:

- maintaining an appropriate degree of personal cleanliness and hygiene; and
- following proper food handling practices

Rationale:
People, who do not maintain an appropriate degree of personal cleanliness, have certain illnesses or conditions or behave inappropriately, may contaminate food and transmit illness to consumers.

To prevent food contamination and transmission of disease to consumers:

1. Food handlers should maintain personal cleanliness, wear suitable protective clothing, hair restraints and footwear. Protective clothing, aprons and gloves should be cleaned frequently and maintained in a good state of repair.

2. Food handlers engaged in food handling activities should refrain from behavior (e.g. smoking, spitting, chewing or eating) which could result in contamination of food.

3. All removable jewelry should be removed prior to working and personal effects and clothing should not be kept in food handling areas.

4. Personnel should always wash their hands when personal cleanliness may affect food safety, for example:
   - at the start of food handling activities;
   - immediately after using the toilet;
   - after handling raw food or any contaminated material, where this could result in contamination of other food items;
   - after sneezing or picking items off the floor.

Training

Objective:
To provide individuals handling meat and meat products with appropriate training and to establish an understanding of the importance of proper food handling practices and manufacturing controls to ensure production of safe meat products.

Rationale:
Training in food handling and manufacturing controls is fundamentally important to any meat-processing establishment. It is important that personnel employed in the production of meat products understand their duties relative to food safety. Inadequate training and supervision of all people involved in meat production and handling poses a threat to the safety of meat products and to the health of the consumer.

1. Initially, an owner of a meat facility shall ensure that at least 25% of employees working in the meat facility, all shifts, hold a current food handler certificate approved by the Ministers, with re-certification every five years.

2. Five years after ministerial approval of recommendations all employees in meat facilities shall be required to hold current food handler certificate.

Transportation and Storage

Objectives:
Measures should be taken to ensure that meat and meat products are transported or stored under conditions that:

- protect meat from potential sources of contamination;
- protect meat from damage likely to render the meat unusable for consumption; and
- provide an environment which effectively controls the growth of pathogenic or spoilage microorganisms and the production of toxins in meat and meat products.

Rationale:
Meat may become contaminated, or may not reach its destination in a suitable condition for consumption, unless effective control measures are taken during transport even where adequate hygiene control measures have been taken earlier in the food chain.

1. Adequate sanitation of the storage premises and of the transportation vehicle is practiced to prevent contamination of meat products with any chemical, microbiological or foreign material hazards.

2. Meat and meat products, stored and distributed, refrigerated or frozen, are continuously kept at the required temperatures to prevent growth of microorganisms. The temperature of storage and transportation for refrigerated and/or frozen products is monitored.

3. Meat and meat products are stored and transported in a manner that minimizes physical damage to packaging and protects the food product from conditions which may cause product contamination.

4. Transportation of meat products takes place in carriers dedicated to food use only. In instances where dual use of carriers may be practiced, procedures are in place to restrict the type of non-food loads to those that do not pose a risk to food loads in the same shipment or to subsequent food loads after acceptable cleaning.

5. There are procedures in place to verify that the shipment of ingredients or meat and meat products was stored and transported in accordance with these regulations prior to its receipt.

6. Provide effective protection from contamination, including dust and fumes.

7. Inspected and uninspected meat must be separated to prevent cross-contamination.

Manufacturing Controls

Objectives:
Individuals handling or processing meat and meat products shall establish procedures to ensure that products are handled/processed in such a manner that does not pose a risk to human health, including:

- documentation of handling/processing procedures;
- controls and monitoring required to ensure product safety;
- documentation to show that control procedures were achieved; and
- verification that these procedures are complete and effective.

Rationale:
It is more effective to ensure product safety by implementing process controls than by testing the finished product. Incorporation and adherence to processing controls enhance product safety.

1. Procedures for handling/processing of meat and meat products should be based on potential food safety hazard(s) associated with ingredients, processing steps and the finished product. These hazards could be of a microbiological, chemical or physical nature.

2. Procedures should identify:
   - hazards requiring control;
   - where these hazards will be controlled;
   - the criteria that need to be met to control the hazards;
   - procedures for monitoring criteria, including record keeping;
   - what action will be taken if the criteria are not met;
   - verification that food safety hazards are controlled.

Recalls for processors

Objectives:
Manufacturers and distributors of meat and meat products, whose products are entering the retail/wholesale market, shall have in place a method to effectively recall any lot of product posing a risk to human health, including:

- a product coding system, permanent legible code or lot numbers on package;
- product distribution records and retention of these records for at least one year after expiration date or "Best Before" date, or if there is no expiration date two years after the product was released for sale;
- notification of Health Canada and Regional Health Authority if a recall is initiated.

Rationale:
A recall is an effective method of removing products from the market when they pose a health hazard to consumers. A product coding system and a product distribution list are essential for identifying products that represent risks to health and their effective removal from the market place.

1. A recall procedure should ensure that the recall of meat and meat products is efficient and can be put into practice at any time. A recall plan should include:
   - person(s) responsible for recall (names, phone numbers);
   - how the recall is to be coordinated and implemented;
   - means of notifying affected customers;
   - means of locating and controlling recalled product;
   - way of assessing the progress and efficiency of the recall.

2. Each prepackaged product should have permanent, legible code markings or lot numbers on the package. The code should identify the meat facility, the day, month and year the product was produced or packaged.

3. Ability to show that all affected product has been identified and removed from the market place. This can be shown by:
   - records of customer names, addresses, phone numbers;
   - records of production, inventory and distribution by lot;
   - verifying that all affected product has been accounted for, based on production, inventory and distribution records.

4. Distribution records should contain the following information:
   - product identification and amount;
   - code or lot number;
   - quantity;
   - customer names, addresses, phone numbers to the initial level of product distribution.

5. If a recall is initiated, notification to CFIA and the Regional Health Authority is required with the following information:

- product name, code markings or lot numbers;
- total quantity of recalled product produced;
- total quantity of recalled product distributed up to this time;
- where recalled product has been distributed;
- quantity of product the customer still has in their possession;
- reason for recall.